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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,622	02/24/2004	Kazumasa Inoue	TKMTP127	2045

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BEYER WEAVER & THOMAS LLP
P.O. BOX 70250
OAKLAND, CA 94612-0250

EXAMINER

CHEUNG, WILLIAM K

ART UNIT PAPER NUMBER

1713

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,622

Applicant(s)

INOUE ET AL.

Examiner

William K. Cheung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-17 is/are pending in the application.
- 4a) Of the above claim(s) 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. The request filed on January 10, 2006 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 10/786,622 is acceptable and a RCE has been established. An action on the RCE follows.
2. In view of amendment filed December 8, 2005, claims 2-3 have been cancelled. Claims 1, 5-17 are pending. Claims 12-17 are drawn to non-elected subject matter.
3. The examiner acknowledges the receipt of amendment filed January 10, 2006. Claims 1, 5-11 are examined with merit.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerkar et al. (US patent 5,604,273) in view of Ohta et al. (US Patent 5,660,626), further in view of Berke et al. (US Patent 5,571,319), and yet, still further in view of Kloetzer et al. (US Patent 4,927,463) for the reasons adequately set forth from paragraph 4 of the office action of October 13, 2005.

*The invention of claims 1-11 relates to a **multi-functional admixture for concrete**, said multi-functional admixture **comprising** Component **A** by **20-84** weight %, Component **B** by **15-79** weight % and Component **C** by **0.3-3** weight % such that their total will be 100 weight %, wherein:*

*said **Component A** is one or more selected from the group consisting of **graft copolymers** obtained by a first process and a second process and salts of graft copolymers obtained further by a third process;*

*said **first process** is for obtaining copolymers with weight-average molecular weight of 10000-50000 by radical polymerization of a mixture of radical polymerizable*

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monomers containing **maleic anhydrides** and **monomers shown by Formula 1** by a total of 95 molar % or more at molar ratio of 50/50-70/30 in the **absence of solvent**;

Formula 1 is given by $\text{CH}_2=\text{CH}_2\text{-O-A}^1\text{-O-R}^1$;

said **second process** is for obtaining graft copolymers by graft reaction of 100 weight parts of said copolymers obtained in said first process with 0.05-5.0 weight parts of polyether compounds shown by Formula 2;

Formula 2 is given by $\text{R}^2\text{-O-A}^2\text{-OH}$;

said **third process** is for obtaining salts of graft copolymers by partially or completely neutralizing said graft copolymers obtained in said second process with one or more selected from the group consisting of alkali metal hydroxides, alkali earth metal hydroxides and amines;

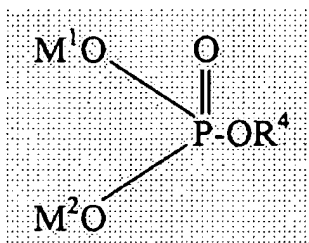
said **Component B** is (poly)alkyleneglycol monoalkyl ether shown by **Formula 3**;

Formula 3 is given by $\text{R}^3\text{-O-A}^3\text{-OH}$,

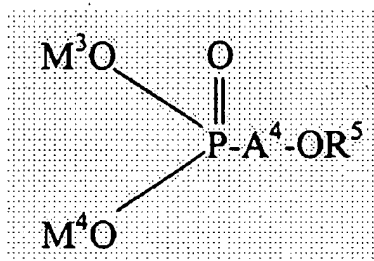
said **Component C** is organic phosphate shown by **Formula 4 or Formula 5**;

Formula 4 is given by

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Formula 5 is given by



where:

R^1 is methyl group, acetyl group or hydrogen atom;

R^2 is aliphatic hydrocarbon group with 8-20 carbon atoms;

A^1 is residual group obtained by removing all hydroxyl groups from (poly)alkyleneglycol with (poly)oxyalkylene group having in molecule only 1-150 oxyethylene units or a total of 2-150 oxyethylene units and oxypropylene units;

A^2 is residual group obtained by removing all hydroxyl groups from (poly)alkyleneglycol with polyoxyalkylene group having in molecule a total of 23-70 oxyethylene units and oxypropylene units that are added in blocks;

R^3 is alkyl group with 3-5 carbon atoms;

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A³ is residual group obtained by removing all hydroxyl groups from (poly)alkyleneglycol with (poly)oxyalkylene group having in molecule only 1-6 oxyethylene units or only 1-6 oxypropylene units, or a total of 2-8 oxyethylene units and oxypropylene units;

R⁴ and R⁵ are each alkyl group with 8-18 carbon atoms;

A⁴ is (poly)oxypropylene group with 1-5 oxypropylene units;

M¹, M², M³ and M⁴ are each hydrogen atom, alkali metal, alkali earth metal, ammonium or organic amine.

Applicant's arguments filed December 8, 2005 and January 10, 2006 have been fully considered but they are not persuasive. Applicants argue the each of the prior art employed by the examiner are silent on the specific weight percent as claimed. However, the examiner disagrees because applicants must recognize that the components A and B as claimed are so broad that the examiner has a reasonable basis to believe that the claimed weight percents of components A and B are inherently possessed in the prior art. Regarding component C, applicants must recognize that Kloetzer et al. (col. 5-6, Table 1 to 3) clearly disclose weight percent of phosphoric acid ester ranging from 0.5 to 0.9 weight percent. Therefore, the 103 rejection set forth is proper.

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Priority

6. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on March 3, 2003. It is noted, however, that applicant has not filed a certified copy of the 2003-55175 application as required by 35 U.S.C. 119(b).

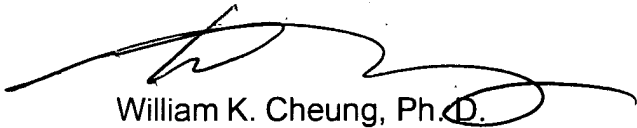
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung, Ph.D.

Primary Examiner

March 11, 2006

**WILLIAM K. CHEUNG
PRIMARY EXAMINER**